## **CORRESPONDENCE**

## EFFECT OF SOME ANTI-COAGULANTS UPON SERO-DIAGNOSTIC TESTS FOR SYPHILIS

To the Editor of the British Journal of Venereal Diseases

SIR,—With reference to the article by Coleman. Appleman, and Kurtz (1955) on the effect of anticoagulants upon the sero-diagnostic tests for syphilis (STS), there are data presented that I feel need revision. The publication of the USPHS, Manual of the STS, 1955, wherein the Kolmer test is exclusively performed using cardiolipin-lecithin antigen, presents some interesting results that markedly differ from those reported by Coleman and his colleagues using lipoidal antigen. I have used the following anti-coagulants: sodium oxalate, sodium citrate, sodium sequestrene, potassium and ammonium oxalate (Wintrobe), in an attempt to perform a complement-fixation using plasma as the antibody (reagin type) fluid. Consistently, whether the patient's sera be reactive, grading one to four, or nonreactive, the cardiolipin Kolmer is always anticomplementary. Could the reason for this phenomenon be due to the fact that there is a predetermined antigen titration of 1:150 using cardiolipin antigen; whereas in the lipoidal test antigen titre is variable with each lot. It would appear that in order to use plasma for the cardiolipin Kolmer a new antigen titration becomes necessary because of the differences in ionic components of plasma and sera. However, this is not practical, since reactivity with the lecithin added for the sera test is predetermined and a variable titration would lead to confusion and possible error.

Yours faithfully,

PHILLIP M. KLEIN.

La-Mel Clinical Laboratory, 656, North Larchmont Boulevard, Los Angeles. January 16, 1956. To the Editor of the British Journal of Venereal Diseases

SIR,—In commenting upon Dr. Klein's letter it would be well to note that the article in question was published when the lipoidal antigen was in common usage, that is, before the publication of the USPHS Manual in 1955. This Manual presents recommended techniques; it presents no results.

Since our investigations have not included a series using the cardiolipin Kolmer reaction, it is not possible to evaluate this test on the basis of the results in the original paper, and from Dr. Klein's letter it would appear to be unsatisfactory.

The fixed titre of the cardiolipin Kolmer antigen in itself would not seem to be the basis of anticomplementary action. The nature of such a reaction remains to be investigated.

Yours faithfully,

M. D. APPLEMAN, R. D. COLEMAN, H. M. KURTZ.

Department of Bacteriology, University of Southern California, Los Angeles, California. February 1, 1956.

## REFERENCES

Coleman, R. D., Appleman, M. D., and Kurtz, H. M. (1955). British Journal of Venereal Diseases, 31, 108.

Kolmer, J. A., Spaulding, E. H., Robinson, H. W. (1955). "Approved Laboratory Technic", 5th ed. p. 819. Appleton-Century-Crofts, New York.

"Manual of Serologic Tests for Syphilis". U.S. Public Health Service, Washington.

Wintrobe, M. (1952). "Clinical Hematology", 3rd ed. p. 302. Lea and Febiger, Philadelphia.